MCKV Institute of Engineering

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Subject: **Object Oriented Programming Lab**   Code:**PC-CS592**
Stream: CSE   Credit: 1.5

Assignment: - 08/ String Handling

A. Write a program to accept a sentence.
Perform the following tasks:
(i) Convert the first letter of each word to uppercase and print the sentence.
(ii) Find the number of vowels and consonants in each word and display them with proper headings along with the words.
Test your program with the following inputs.
Example
Input: God is great.
Output: God Is Great

Word	Vowels	Consonants
God	1	2
Is	1	1
Great	2	3

B. Write a program that accepts a comma-separated sequence of words as input and prints the words in a comma-separated sequence after sorting them alphabetically.
Input Format: The first line of input contains words separated by the comma.
Output Format: Print the sorted words separated by the comma.
Example:
Input: without,hello,bag,world
Output: bag,hello,without,world

C. Assuming that we have some email addresses in the "username@companyname.com" format, please write program to print the company name of a given email address. Both user names and company names are composed of letters only.
Input Format: The first line of the input contains an email address.
Output Format: Print the company name in single line.
Example;
Input: john@google.com
Output: google

D. The encryption of alphabets are to be done as follows:
A=1
B=2
C=3
. . .
Z = 26
The potential of a word is found by adding the encrypted value of the alphabets.
Example: KITE
Potential = 11 + 9 + 20 + 5 = 45
Accept a sentence. Each word of sentence is separated by single space. Decode the words according to their

potential and arrange them in ascending order. Output the result in the format given below:
Example 1

> ***Input*** : THE SKY IS THE LIMIT.
> ***POTENTIAL*** :
> THE = 33
> SKY = 55
> IS = 28
> THE = 33
> LIMIT = 63
> OUTPUT : IS THE THE SKY LIMIT

E. You want to know the ASCII value of all the names of your friends. Write a program in java to store n number of names (n is the user input) in a single-dimensional array. Now create another array, which stores ASCII values of the corresponding names. Finally, display the name having the highest ASCII value among the names.

F. Write a program to input a word from the user and remove the consecutive repeated characters by replacing the sequence of repeated characters by its single occurrence.
Example:
Input –Jaaavvvvvvvvaaaaaaaaaa
Output – Java

G. A string with parentheses is well bracketed if all parentheses are matched: every opening bracket has a matching closing bracket and vice versa. Write a java function wellbracketed(s) that takes a string s containing parentheses and returns True if s is well bracketed and False otherwise.
Hint: Keep track of the nesting depth of brackets. Initially the depth is 0. The depth increases with each opening bracket and decreases with each closing bracket. What are the constraints on the value of the nesting depth for the string to be wellbracketed?
Here are some examples to show how your function should work.
>>> wellbracketed("22)") False
>>> wellbracketed("(a+b)(a-b)") True
>>> wellbracketed("(a(b+c)-d)((e+f)") False

H. Given a string of odd length greater 7, return a string made of the middle three chars of a given String
Original String is JhonDipPeta
Middle three chars are Dip
Original String is Jasonay
Middle three chars are son
Given 2 strings, s1 and s2, create a new string by appending s2 in the middle of s1.
append Middle("Chrisdem", IamNewString) → "ChrIamNewStringisdem"

1.

2.

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Signatures of the Faculty Members   Signatures of HOD (CSE)